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ABSTRACT

This document presents a competency-based framework for professional development of certified health education specialists (CHES). Section 1 outlines a process that colleges and universities can use to analyze their curricula for coverage of the health education competencies expected of CHES. The framework's development is traced, and guidelines for its application are provided. Section 2 consists of seven subsections detailing the competencies required by CHES to carry out the following professional responsibilities: (1) assessing individual and community needs for health education; (2) planning effective health education programs; (3) implementing health education programs; (4) evaluating the effectiveness of health education programs; (5) coordinating provision of health education services; (6) acting as a resource person in health education; and (7) communicating health and health education needs, concerns, and resources. Each subsection contains the following items: (1) a discussion of the CHES' role in executing the specific responsibility in community, medical care, school, or workplace settings; (2) detailed discussions of the competencies in the specific area of responsibility; and (3) lists of subcompetencies cross-referenced to behavioral objectives. The following items are appended: guidelines for using the CHES responsibility matrix; a glossary; and a chronology of the development of national certification for health education specialists. (MN)

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A Competency-Based *framework* for Professonal Development of Certified Health Education Specialists

THE NATIONAL COMMISSION FOR HEALTH EDUCATION CREDENTIALING, INC.

1996

NCHEC FRAMEWORK TASK FORCE

The Commission would like to acknowledge the members of the task force responsible for reformatting the Framework:

Martha Alexander	Melissa Alperin	Martha DuShaw
Brick Lancaster	Kara Marchman	Jeannette May
Kathleen Middleton	Kathleen Miner	Kathleen Parker
Patricia Poindexter	Muriel VanPatten	Katherine Wilson

The Commission would also like to acknowledge those who reviewed various drafts:

Michael Cleary	Ellen Capwell	Martha DuShaw
Marian Hamburg	Wanda Jubb	Patricia Mail
Kathleen Miner	Marilyn Schima	Katherine Wilson

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Dedication

Marion B. Pollock, Ed.D.
1914–1995

It is with an enormous sense of gratitude that the National Commission for Health Education Credentialing (NCHEC) dedicates this edition of A Competency-Based Framework for Professional Development of Certified Health Education Specialists to Dr. Marion B. Pollock. Dr. Pollock was a leader in the health education profession for three decades. She held elected offices in the American School Health Association, the Association for the Advancement of Health Education and the American Public Health Association.

Dr. Pollock contributed her professional competence, her technical skills and her financial resources to NCHEC during the beginning stages of Framework documentation. She edited the initial list of the health education competencies and helped format the competencies into the document. The dedication of this edition of the Framework provides formal acknowledgment and testimony of the appreciation that the Commission has for her life's work. Her commitment to the health education profession will live on through the many health educators who achieve the status of Certified Health Education Specialist.

TABLE OF CONTENTS

Introduction 1

Section I: **Using the Framework** 5
Who Can Use the Framework 7
The Health Education Student 7
The Health Education Practitioner 8
Other Health Professionals 8
Potential Employers 8
Policy Makers and Funding Agencies 9

How the Responsibilities and Competencies Are Used in Curriculum Review and Development 11
Purpose 11
Background 11
Application 13

Section II: **CHES Responsibilities and Competencies** 15
Responsibility I: Assessing individual and community needs for health education 16
Responsibility II: Planning effective health education programs 22
Responsibility III: Implementing health education programs 29
Responsibility IV: Evaluating effectiveness of health education programs 36
Responsibility V: Coordinating provision of health education services 42
Responsibility VI: Acting as a resource person in health education 48
Responsibility VII: Communicating health and health education needs, concerns and resources 54

Conclusion 61

References 63

Appendices 65
A: How to use the CHES Responsibility Matrix 65
B: Glossary 81
C: A Chronology of Events 85

Introduction

HEALTH EDUCATION HAS EMERGED as a crucial strategy of public policy in the nation's efforts to promote health and prevent disease. As the national necessity for more and better health education has escalated, considerable attention has been focused on the academic preparation of health education specialists. A critical mass of professional knowledge and skills, innovative capacities, and ethical sensitivities is necessary to ensure quality health education. At no other time in the history of its professional development has health education been more poised to contribute in a measurable way to what has so aptly been called the "second epidemiological revolution." There is now a solid basis for the preparation, evaluation and certification of health educators.

The *A Competency-Based Framework for Professional Development of Certified Health Education Specialists* is predicated on the fact that health education is a profession capable of providing the leadership necessary for improving health in a rapidly changing, culturally pluralistic and technologically complex society. The health educator of today and tomorrow must possess a wide range of competencies. The *Framework* builds on two national conferences, the 1978 Bethesda conference on *The Commonalities and Differences in the Preparation and Practice of Health Educators* and the 1981 *National Conference for Institutions Preparing Health Educators.* The competencies are generic to the practice of health education, whether it takes place in schools, workplaces, medical-care settings, public health settings or other educational settings of the community. The potential is the positive, liberating and empowering force in the lives of people of all ages (See Appendix D for *A Chronology of Events*).

The goal of health education is to promote, maintain and improve individual

and community health. The teaching-learning process is the hallmark and social agenda that differentiates the practice of health education from that of other helping professions in achieving this goal. Like that of the other helping professions, health education's methodologies require its entry into a social contract in dealing with people; however, it is the emphasis on the teaching-learning process — the inherent belief in the individual's capacity to learn and assume responsibility — that comprises the *raison d'etre* of health education and that sets it apart from other professions. Health education is eminently committed to enabling an empowered role for people to define their problems, set their priorities and create practical solutions by which they achieve a sense of interest in, commitment to and ownership of the efforts used to address health issues. Health education respects the individual as an actively involved learner and a full partner in the change process who is learning to act on, respond to and improve his or her environment.

No introduction to a document such as this would be complete if it did not contain a caveat regarding the potential dangers of professionalism and the temptation to approach professional preparation standards of competency in a technocratic or prescribed fashion. Oddly enough, the profession has entered an era in which the competency of professionals increasingly (and perhaps understandably) comes under public suspicion. Both the public and professional observers have expressed considerable doubt regarding morality and the future of professional education and the nature of professional intervention (at least as they have come to be defined by the traditional professions). Much has been written recently about whether professional work and education for such work should and can be reformed.

Change is taking place in the health professions. This change is occurring largely in response to the public's wavering confidence, and to its desire for increased quality assurance and for protection in the standards of all professional competency.

What does the foregoing have to do with this framework for professional development? The relevance lies in the fact that health educators will need to function professionally not only in the sense that professionalism implies standards of technical role competence and accountability, but also in the equally important sense that being professional in the future will require a radically new set of process-oriented sensibilities and ways of thinking about and understanding the aspects of the human condition and emerging social environments that can lead to health or to disease and social problems. The new model of professionalism in the public service will, somehow, need to go beyond narrowly defined, old-fashioned notions of professional practice that have prevailed.

The value systems and philosophical tenets that underlie health education practice as envisioned by the National Task Force have become the salient features for a new definition of what it means to be a competent professional. This new breed of professional must come with intellectual predispositions that are rigorously interdisciplinary, must have an open perspective on human

problems and must have a sense of decency for what it means to be socially conscious. This is necessary because the human service professional must function in practice environments often characterized by political ambiguities, modest public resources and, at times, intense skepticism from both the public and other professionals.

This competency-based framework for professional development is at the vanguard of the effort to help prepare such professionals for the field of health education. The framework bespeaks the field's deep interest in and collective commitment to codifying and standardizing those core competencies that will be required of a profession that is innovative and responsive to society's ever-changing educational needs for health. No framework can ensure that curricula or other professional development programs will create the "meta" qualities of professional excellence such as dedication, intuitive judgment, motivation, perseverance, caring or ethical and moral integrity; nor should it attempt to systematize a field whose pluralism and diversity in approaches to professional education — perhaps its greatest strengths — are vital to continued innovation of practice in response to the public's needs.

The above is based on a preface written by John P. Allegrante, Ph.D. for the first Framework document called ***A Framework for the Development of Competency-based Curricula for Entry Level Health Educators***, (National Task Force on the Preparation and Practice of Health Educators, Inc., New York, 1985). Dr. Allegrante serves as the Chair, Department of Health Education, Teachers College, Columbia University, New York City, NY. The National Commission for Health Education Credentialing, Inc. is grateful to Dr. Allegrante for allowing the use of his remarks in the introduction to this Framework.

SECTION I

Using the Framework

Who Can Use the Framework

THE ORIGINAL PRIMARY intent of the *Framework* was to assist faculty in health education curriculum development. However, it also has utility for the health education student, the practicing health educator, and others.

The Health Education Student

For the student or prospective student, the *Framework* document provides a look at the health education profession as defined by the seven areas of responsibility shown in Section II. The prospective student is able to use the *Framework* to determine if a curriculum in a potential program of study will meet these health education responsibilities and their respective competencies or to decide if he or she wants to become a health educator.

Once enrolled in a health education program, the student can use the *Framework* as a personal inventory to assess progress toward becoming a health educator; that is, to determine which competencies and sub-competencies have been mastered. It is suggested that the student assess his or her progress at intervals during the student's course of study and do a final review at the completion of the health education program. The *Framework* competencies can also serve as a study guide for the examination which leads to certification as a Health Education Specialist (CHES).

The Health Education Practitioner

Perhaps the most significant use of the *Framework* for practitioners is as a guide for continuing education. The *Framework* assists the practitioner in selecting areas from the seven responsibilities and their respective competencies in which to seek continuing education opportunities. By referring to objectives listed for each sub-competency, practicing health educators will be able to determine continuing education appropriate to address these objectives, and thus enable them to enhance competencies.

Because the *Framework* reflects standard responsibilities for which health educators should be prepared, and the competencies and skills necessary to successfully fulfill these responsibilities, it may also serve as a tool to highlight gaps and areas for continuing education. The practicing health educator can refer to the *Framework*, particularly the matrices in Appendix A, to track continuing education received in competency areas, and recognize areas that require additional emphasis. In this way, the Framework serves as a guide for professional growth and development.

Other Health Professionals

Professionals outside health education often have a limited view of the responsibilities of the health educator. Responsibilities and competencies can be used to enhance the understanding and appreciation of health education. Partnerships between professions can be established by determining where the roles of disciplines overlap and where they depart from that of health education, and thereby maximize collaborative efforts in the provision of services.

Potential Employers

Those in business are accustomed to seeking out the most qualified workers and should look for CHES when employing worksite health promotion personnel, consumer health educators, school health educators and other health education personnel. The Certified Health Education Specialist has passed a national credentialing exam based upon the curriculum framework, and continuing education is required to maintain certification. The skills of the CHES include the ability to:

- assess individual and group needs for health education and health promotion,
- plan and conduct effective health education and health promotion programs,
- evaluate the effectiveness of health education and health promotion programs,
- coordinate provision of health education and health promotion services,
- act as a resource person in health education and health promotion issues for others in the agency, and

- communicate health education- and health promotion-related needs and concerns.

The CHES competencies and sub-competencies provided in Section II can be used by employers in several ways, such as:

- the key components of descriptions for new positions,
- the basis for performance standards as appropriate for their business,
- an interview guide to assess the skill level of a potential employee, and
- an outline for creating an individual career development plan (human resource development) for existing personnel.

When properly conducted, worksite health promotion programs have been shown to lower employee sick leave, insurance costs and health care claims, and to increase productivity and morale.

Policy Makers And Funding Agencies

The *Framework* can be used by policy makers at all levels of government (federal, state, local), as well as policy makers in nongovernmental organizations, schools and businesses in:

- developing health programs;
- establishing organizational policies;
- considering community, state or national policy, i.e., laws, regulations, and ordinances;
- determining criteria for funding projects and individuals; and
- educating boards, management and leadership about the potential of health education.

By reviewing this document, policy makers will become aware of the unique professional preparation of health educators. It will also help them to set broad standards and expectations for the health education components of programs. The document will also clarify for policy makers the skills and competencies professionally prepared health educators should bring to a program or multidisciplinary team.

Likewise, funding agencies and organizations can use this document to develop funding proposal criteria and review standards. The document can assist reviewers of health education proposals in the analysis of the professional skills and competencies of proposed program staff. It can also be used to develop project staffing and program development monitoring of projects.

College and University Faculty

See Section I. How the Responsibilities and Competencies Are Used in Curriculum Review and Development (page 11).

How the Responsibilities and Competencies Are Used in Curriculum Review and Development

Purpose

This section outlines a process that colleges and universities can use to analyze their curricula for coverage of the health education competencies. Faculty can use this methodology to determine where each of the competencies is covered in their curriculum and to assess students' health education practice.

Background

Competency-based instruction is the underlying concept in the design of this document. Competency-based instruction implies that there are clearly stated measurable statements that describe student performance. These statements form the basis upon which courses and student assignments are built. The courses and assignments are designed and arranged in a manner that provides for student attainment of the skills associated with the competencies. By the time students have completed the entire curriculum, they should have achieved mastery of the total range of competencies.

The development of this set of competencies for health education began in the middle 1970s. Health education leaders met and outlined a process that would specify the competencies associated with the health education profession. An initial step in their designation was an extensive assessment, called a Role Delineation, that identified the skills associated with health education practice. Health educators from the many different practice settings responded to questionnaires that asked them to assess the importance of specific knowledge and skills in the delivery of their professional work. The result of these and other

efforts is this *A Competency-Based Framework for Professional Development of Certified Health Education Specialists*. (For a comprehensive chronology of all the steps in the development of the *Framework* see Appendix D.)

The *Framework* is arranged in three levels of specificity under each of the seven areas of responsibility. They are:

1. Competency — that which reflects the ability of the student to understand, know, etc., and is equivalent to course goals;
2. Sub-Competency — that which reflects the ability of the student to list, describe, etc. and is equivalent to course objectives; and
3. Objectives — those which reflect the ability of the student to perform.

The scope of the *Framework* is very broad and covers the skills associated with health education in all areas of practice: school, community, worksite, health care and higher education. As a result, the *Framework* has importance for academic institutions that prepare health educators. To people who are unfamiliar with competency-based curriculum in professional preparation, instruction based upon performance and not content seems too ambiguous. Upon reflection, it becomes clear that professional competence is anchored by adapting to innovation and contemporary issues. Health information amassed in professional preparation programs can soon become outdated and insufficient. Therefore, the type of curriculum that emerges from a competency approach is characterized by the "doing" of professional tasks, such as planning and evaluation, rather than solely knowing about topical areas, such as drugs and nutrition.

Yet, performance can not be acquired in the absence of content. Subject matter content provides the hook upon which to hang competence. For example, a course designed to assist students in gaining mastery in evaluation skills can use specific topics, such as drug or nutrition, as illustrations. Thus, both performance and content are being taught simultaneously.

The major difference between a content-based curriculum and a competency-based curriculum is in the organizing unit. In a content-based curriculum, the organizing units are topical learning objectives, such as *the student will be able to describe the nutritional benefits of the USDA food guide pyramid,* organized into a subject-centered course, such as Nutrition. In a competency-based curriculum the organizing units are performance-centered objectives, such as *the student will be able to use data collection methods appropriate to the objectives*, organized into a skill course such as Evaluation. The competency-based curriculum has a distinct advantage over the content-based curriculum in that it prepares individuals for a lifetime of professional practice regardless of setting, rather than focusing on topics that are apt to become obsolete during the tenure of one's professional life.

Application

The *Framework* is designed as a guide. It is intended to describe, not prescribe. At its core, the *Framework* assumes that the competencies associated with professional health education practice are generic and independent of the setting in which the health educator works. This is not to say that different sites of practice do not have unique requirements and expectations of the health education specialists who work there. These differences can be incorporated into the scope and sequence of the entire curriculum of professional preparation programs. Those planning to work in a community health agency might need more preparation in public health policy-making, while those preparing for high school teaching need emphasis on teaching techniques. Another way to account for the variations in practice settings is to link the generic competencies to site-specific content.

As colleges and universities apply *A Competency-Based Framework for Professional Development of Certified Health Education Specialists* to their preparation programs, it is important to keep in mind that the review intends to determine the extent to which their curricula prepare their students to enter the profession of health education. A faculty review of the curricula will identify areas where the programs are congruent with the *Framework* and where there are gaps. (To facilitate the review, eight matrices with directions for completion are included in Appendix A to guide the process.)

After the review has been completed and the gaps have been noted, the faculty can modify their learning objectives and methodologies to ensure that their courses prepare students for the contemporary practice of health education. The application of the *Framework* does not dictate a particular teaching strategy nor does it translate into lesson plans. The techniques used by individual programs or instructors to implement the competencies may vary widely and are adaptable to many educational approaches such as case studies, field work, lectures, term papers, computer-aided instruction, self-instruction and thesis research. No matter what the educational approach, the teaching strategies need to:

- provide the students opportunities to understand, observe, and practice the skill specified in the competency;
- use current health concerns to introduce applicable content;
- select appropriate methods; and
- encourage students' use of past experiences and current abilities.

The *Framework* provides universities, professional organizations, and accreditation agencies a common basis of skills for the development, assessment, and improvement of professional preparation for health educators.

SECTION II

CHES Responsibilities and Competencies

Area of RESPONSIBILITY I

Assessing Individual and Community Needs for Health Education

The Role

The primary purpose of needs assessment is to gather information to determine which if any health education activities are appropriate in a given setting. Needs may be basic, i.e., essential to the comfort and well-being of every human being (food, water, warmth, oxygen, etc.), or indicators of a gap between conditions as they are and as they ought to be. Although the term "problem" is frequently used interchangeably in health education with "need," strictly speaking they are different. A health problem is defined as a potential or real threat to physical or emotional well being, amelioration or removal of which is a need.

Needs assessment is the systematic, planned collection of information about the health knowledge, perceptions, attitudes, motivation, and health practices of individuals or groups and the quality of the socioeconomic environment in which they live. Assessing needs logically precedes program planning. It provides data that determine whether a health education program is justified, and if so what its nature and emphasis ought to be.

Community Setting — The health educator in the community draws on many sources of current data such as health planning agencies, public health departments, census reports, and interview data obtained from community leaders as well as from members of the target group. These data provide information about felt health needs. If specific behaviors or health practices are causally linked to the incidence of major health problems, then a health education program may be planned to motivate and facilitate voluntary, desirable changes in those behaviors.

Medical Care Setting — In the medical care setting, complaints by health professionals about a growing incidence of emergency room visits might lead the health educator to survey records to pinpoint the extent to which the problem was general or limited to patients with particular kinds of health-related emergencies. Interview data and records relative to the problems of a random sample of emergency care patients might be analyzed to determine the causes of visits within a given time frame. Interviews might also be conducted with health care providers.

"Tracking" a patient through the system, or conducting a system analysis are other strategies employed in making needs assessment studies.

School Setting — In a school setting, needs assessments are used to determine the scope and sequence of curricula. Needs identified by national and state agencies, such as legislatures, should be considered and utilized, but local community data are essential to good curriculum planning. School and public health records are both important sources of basic data. Information about health knowledge, attitudes and practices can be gathered directly from students, parents, administrators and school health personnel through testing, surveying and interviewing. In addition to revealing the extent of some current health problems such as malnutrition, sexually transmitted diseases, unwanted teenage pregnancies and the use of alcohol and other drugs, needs assessments can pinpoint social conerns of students, such as emothional stress and peer rejection, and can also identitfy areas of misinformation and misconception.

Workplace Setting — At the workplace, medical professionals maintain records that can be used to identify health needs of the workers, e.g.; data about health insurance claims, absenteeism and its causes, types of accidents and severity of injuries, and workmen's compensation claims. In addition, the health educator in this setting would need to survey employees to discover their felt needs and interests. Analysis of all of these data would indicate priority needs for health promotion programs.

THE COMPETENCIES

Competency A.
Obtain health-related data about social and cultural environments, growth and development factors, needs and interests.

Competency B.
Distinguish between behaviors that foster and those that hinder well-being.

Competency C.
Infer needs for health education on the basis of obtained data.

Competency A.
Obtain health-related data about social and cultural environments, growth and development factors, needs and interests.

Expanded Content Description — Health-related information about social environments reflects eating patterns and diet choices, lifestyles, interpersonal relationships, personal health practices, beliefs, attitudes and value systems learned in the home and in the community. The impact of cultural environments as an influence on health behavior can be considerable or minor depending on the number of a given ethnic group in an area and the recency of its arrival. Customs, characteristics and ways of solving health problems vary among cultures.

Growth and development describe the lifelong patterns of physical, social, emotional, and intellectual change common to every human being regardless of culture. Although growth and development are different, they are inseparable in that neither takes place without the other. Growth refers to quantitative changes, such as increases in size and structure of the body, internal organs and the brain. Development refers to changes that are qualitative, a progressive series of orderly changes leading forward toward maturation. Each change is dependent on what precedes it and affects what will follow it. As the individual grows and develops, needs and interests change accordingly. For example, the child's needs and interests are simpler and more basic than those of the young adult whose needs and interests are different from the aging. Although basic needs, (those for food, water, affection, warmth, etc.) are the same for all people, each of us is different in many ways from everyone else, and each of us changes in many ways as we grow and develop during the years between conception and death. Program planning must be based upon valid information about the current needs of the individuals for whom it is intended.

RESPONSIBILITY I

Sub-Competencies	*Objectives*
1. Select valid sources of information about health needs and information.	• Differentiate between *validity* and *reliability* as indicators of relevance and dependability. • Evaluate the validity and reliability of sources of health information.
2. Utilize computerized sources of health-related information.	• Name easily accessible data banks (e.g., ERIC, Medline, National Clearinghouses, etc.). • Explain methods of accessing data banks.
3. Employ or develop appropriate data-gathering information.	• Describe survey techniques commonly employed by health educators. • Appraise suitability and validity of various health survey instruments. • Design valid health behavior inventories or needs assessment procedures.
4. Apply survey techniques to acquire health data.	• Develop a plan for effective administration of survey instruments. • Organize the obtained data to facilitate analysis and interpretation.

Competency B.

Distinguish between behaviors that foster and those that hinder well-being.

Expanded Content Description — Most behaviors affecting health are based upon a complex of knowledge, beliefs, attitudes and values, hopes or fears, personal goals, desire for social acceptance and a host of other variables often having nothing to do with health per se. The principal determinants of behaviors exhibited by the same person can differ dramatically from one time to another depending on the situation. Behaviors seldom exhibit themselves in ways dependably assessed as typical, of course. Yet most behaviors in and of themselves are either beneficial or harmful, if only for the moment. It is the aggregate of all of these small effects that in the long run fosters or hinders well-being. Those whose goal it is to change behaviors influencing health must be able to pinpoint those most in need of change before effective plans to that end can be initiated.

Sub-Competencies	*Objectives*
1. Investigate physical, social, emotional and intellectual factors influencing health behaviors.	• Describe behavioral and non-behavioral causes of behaviors. • List physical, social, emotional and intellectual factors commonly influencing choices among health behaviors. • Identify principal determinents of positive or negative health behaviors in specified situations.
2. Identify behaviors that tend to promote or compromise health.	• Explain cause and effect relationships between health behavior and well-being. • Predict immediate and long range effects of specified health behaviors. • Advocate potential benefits of a healthful lifestyle.
3. Recognize the role of learning and affective experiences in shaping patterns of health behavior.	• Differentiate between cognitive and affective learning experiences. • Explain the part played by perceptions and values as health behavior determinants. • Describe ways health behaviors are learned or changed.

Competency C.

Infer needs for health education on the basis of obtained data.

Expanded Content Description — Needs of health education should not be assumed or estimated, but must be based upon information obtained in as many ways and from as many reliable sources as is feasible. Data obtained through interviews, observations, morbidity and mortality reports, questionnaires, health behavior inventories, health risk appraisal instruments and other survey techniques must be tabulated and summarized. Trends and patterns of need relative to specified individuals or groups should be discernible once all of the data are organized and examined.

Sub-Competencies	*Objectives*
1. Examine needs assessment data.	• Interpret data gathered through library research or as reported by health agencies. • Classify health-related data according to specified variables (age, sex, risk factor of interest, etc.).
2. Determine priority areas of need for health education.	• Establish criteria for the selection of priority areas of need. • Apply those criteria to identification of those areas most in need of health educators.

AREA OF RESPONSIBILITY II

Planning Effective Health Education Programs

THE ROLE

Program planning begins with the assessment of existing health needs, problems, and concerns. The extent to which these are directly linked to health behaviors determines the specific changes in behaviors for which the program planning process is set in motion. Relevant people are identified and involved in the project, objectives are established, educational methods selected and resources located. It is within this process that planning for program evaluation is begun as well.

Community Setting — In a community setting in which a needs assessment identified hypertension as a significant health problem, the health educator would convene a meeting of representatives of relevant organizations and groups to 1) explore available services in the community, 2) determine the type of health education most needed (e.g., one that would motivate people to seek screening for unsuspected hypertension), and 3) secure financial support from agencies and groups that would want to participate. Establishing program activities and selecting specific interventions would depend upon the characteristics of the people involved, their special constraints and concerns, and the fit between program schedules and other obligations of the potential participants.

Medical Care Setting — Research indicates that patients who have realistic expectations regarding surgery experience a smoother, faster recovery. The health educator in a medical care setting would work with a group of nurses, physicians, and anesthetists to plan an orientation program for patients who elect major surgery of some kind. The goal of the program would be to provide education for patients prior to their admission to the hospital. The role of the health educator in this setting would be to assist the committee in establishing behavioral objectives, identifying roles of staff in providing that education, selecting teaching methods or strategies, evaluating results, documenting the education effort, designing promotion activities and training interdisciplinary staff to conduct the program as appropriate.

School Setting — Although needs assessment is an essential first step in planning health education in schools, ordinarily the decision to provide such instruction is made by administrators. A health teaching specialist ultimately assigned to develop the curriculum would therefore not be required to sell the idea to anyone so much as to implement a program that would meet the student needs that motivated the administrative decision in the first place. In such a situation the school health educator would organize an advisory committee consisting of teachers with special interest in health teaching, a school administrator, members of community groups such as the medical society, voluntary agencies, parents, youth group leaders, clergy and student representatives. Curriculum planning would be carried out according to known learner needs and interests, community health needs, and recommendations gathered form the literature and from the advisory committee.

Workplace Setting — In the workplace, data from insurance records, safety records, and workers compensation claims, as well as information gained through a survey of employee needs

would provide the basis for a presentation to top management outlining the benefits and costs of a health education program. Upon gaining administrative support, the health educator convenes an employee committee with representatives from all levels of the organization to advise and make recommendations concerning program priorities, objectives, scheduling of programs, publicity, incentives and possible fees.

THE COMPETENCIES

Competency A.
Recruit community organization, resource people and potential participants for support and assistance in program planning.

Competency B.
Develop a logical scope and sequence plan for a health education program.

Competency C.
Formulate appropriate and measurable program objectives.

Competency D.
Design educational programs consistent with specified program objectives.

Competency A.
Recruit community organizations, resource people and potential participants for support and assistance in program planning.

Expanded Content Description — Health is a community affair, and so must health programs be if they are to be successful. The participation of key health professionals, community leaders, clergy, educators, and interested parents and students in planning health education programs is essential. Participation may be structured as in assembling an advisory committee, or ad hoc as in securing the assistance of certain specialists in planning or helping to carry out specific aspects of a plan. The function of advisory groups is to consider problems, gather data about them, and recommend activities or programs that might solve or alleviate them. The role of health educators and other staff then is to recruit individuals who have the desired expertise and are willing and able to serve as needed. Health educators must know how to identify and motivate community members who can so effectively participate in the preplanning and planning processes.

RESPONSIBILITY II

Sub-Competencies	*Objectives*
1. Communicate need for the program to those whose cooperation will be essential.	• Interpret obtained needs data in terms easily comprehended by others. • List methods of presenting proposed programs to various audiences. • Explain means to motivate potential program participants. • Describe media most effective for disseminating health information to specified groups.
2. Obtain commitment from personnel and decision makers who will be involved in the program.	• Define a set of criteria for the selection of personnel and advisors. • List steps involved in obtaining commitments to the program. • Match program tasks with people capable of fulfilling them.
3. Seek ideas and opinions of those who will affect or be affected by the program.	• Identify sources of information reflecting the viewpoints of individuals and groups who will be involved. • Explain ways of acquiring a wide range of views and opinions about a proposed program. • Interpret views of one audience to another when they differ in significant ways. • Elicit administrative support and recommendations regarding the proposed program.
4. Incorporate feasible ideas and recommendations into the planning process.	• Define concepts of feasibility as they affect health education programs. • Describe methods of synthesizing ideas and opinions into a usable format. • Identify criteria for selecting information useful in program planning. • Explain ways of assessing feasibility of ideas.

Competency B.
Develop a logical scope and sequence plan for a health education program.

Expanded Content Description — Scope represents a number of decisions that set the boundaries on what is to be included in an instructional program. Sequence is concerned with planning when each of the selected subject areas will be presented within the time frame proposed for that instruction. Deciding when each element will be dealt with cannot be done haphazardly but must be based on careful study of the readiness of the learners, their present abilities, past experience, and the nature of the subject matter itself. There is no one best way of ordering subject matter to be covered by a program, of course. One good way is to start with the familiar and comfortable or non-threatening, and proceed to material that builds upon what has just been reviewed in ways that help the learner to grasp essential associations and to gain ability to generalize about what has been learned. Determining scope and sequence of an educational program is an essential first step in planning. Only when this has been completed can valid general and enabling objectives be developed.

Sub-Competencies	*Objectives*
1. Determine the range of health information requisite to a given program of instruction.	• Investigate felt needs for specific health information perceived by representative learners. • List subject areas commonly accepted as comprising the scope of health education in a given setting. • Identify the set of subject areas essential to health instruction designed to meet established needs.
2. Organize the subject areas comprising the scope of a program in logical sequence.	• Propose an orderly arrangement of subject areas as they might logically be presented and taught. • Plan meaningful linkages between subject areas.

Competency C.
Formulate appropriate and measurable program objectives.

Expanded Content Description — Appropriate objectives are those designed to meet established needs in ways that recognize the past experience and present abilities of the learners. Measurable objectives clearly describe what the learner is expected to know about, how to do, value or accept as worthwhile or what a competent adult or practitioner actually does as a consequence of the subsequent related instruction. Knowledge of results is nearly impossible in the absence of these kinds of statements.

The role of the broadly conceived general objective is to provide a framework of statements to serve as the organizing center of an educational program. The role of the enabling objectives is to serve as the focus of specific learning experiences. Enabling objectives are expected to facilitate some part of the learning implicit in the general objectives. In other words, general objectives focus on outcome, while enabling objectives focus on means to that end. In sum, the enabling objectives should comprehensively facilitate the general objectives from which they are inferred. As a rule, general objectives are proposed by program designers, while enabling objectives are developed by individual health educators as means of planning learning activities for specific individuals or groups. However, whether general or specific, effectiveness in communicating instructional intent is the best test of the quality of any educational objective.

Sub-Competencies	*Objectives*
1. Infer educational objectives that facilitate achievement of specified competencies.	• Differentiate between cognitive and affective behaviors or skills. • List cognitive and affective behaviors commonly used in defining objectives.
2. Develop a framework of broadly stated, operational objectives relevant to a proposed health education program.	• Employ verbs descriptive of the skills implicit in a competency statement. • Devise objectives stipulating both content and skill to be mastered.

Competency D.

Design educational programs consistent with specified program objectives.

Expanded Content Description — The relevance of educational programs to the objectives upon which they are based is sometimes more assumed than actual. Unless those objectives are employed as the blueprints for learning opportunities, it's easy to stray from stated goals. The challenge is to arrange a set of health education activities that give the learner practice in objectives as stated. The plan must introduce the subject matter specified in the objective (not simply assume it is already known and can be used in the plan), and it must cover but not go beyond what is stipulated. Finally, it must give the learner an opportunity to deal with that subject matter, and with the behavior called for. Not something else, as perhaps simply listening to somebody talking about the subject matter, when it was supposed to be "identifying" or "interpreting" that was to be happening.

Sub-Competencies	*Objectives*
1. Match proposed learning activities with those implicit in the stated objectives.	• Match behavioral terms with activities as proposed in the learning opportunities. • Infer the boundaries of subject matter specified in the objectives.
2. Formulate a wide variety of alternative educational methods.	• List methods that might provide practice in specified behaviors. • Classify activities as primarily cognitive or affective in effect.
3. Select strategies best suited to implementation of educational objectives in a given setting.	• Identify educational strategies best suited for use with large groups, small groups, or individual instruction. • Develop a plan for instruction consistent with selected objectives.
4. Plan a sequence of learning opportunities building upon and reinforcing mastery of preceding objectives.	• Define the term "reinforcing" as it concerns sequences of learning opportunities. • Assess the consistency of given learning opportunities with their accompanying objectives.

AREA OF RESPONSIBILITY III

Implementing Health Education Programs

THE ROLE

The business of a health educator is to educate people about healthful behaviors and to motivate the adoption of a healthful lifestyle, whatever the setting. Moreover, the methods, techniques, and resources used in implementing educational programs are essentially the same in every situation. Other processes involved in the effective implementation of a health education program include designing, managing and evaluating the activities employed to that end.

Community Setting — In the community setting, if the health education specialist were implementing a smoking cessation program, the mass media would be used to inform concerned people about the availability of the program (dates, times, place, topic, etc.). The educator would need to train group leaders to facilitate group discussion and broaden the number of sessions that could be offered. Programs would be monitored to be sure that the quality of instruction was even among leaders and that outcomes were consistent with objectives. Other methods such as role playing, simulations, games, demonstrations, and techniques such as use of closed circuit television presentations and lectures delivered by authoritative and stimulating speakers are frequently used.

Medical Care Setting — In the medical care setting, a smoking cessation program for outpatients has been planned. The health educator's coordination function is to act as the liason among individuals and groups within the clinic, explain how the program will operate and anticipate any problems that might emerge. This reponsibility also includes the preparation of materials for those professionals who will be involved in the program and maintaining open communications among group facilitators.

School Setting — In the school setting, implementation usually has to do with the instructional function in which the health teaching specialist seeks to increase students' knowledge, foster positive attitudes toward the value of health, and to promote adoption of health-enhancing behaviors. A classroom teacher is responsible for implementing the health education program (curriculum) formulated by others, usually district level committees and school administrators. A teacher infers sub-objectives appropriate for learners at an assigned level, and prepares related daily lesson plans that build, one upon the other, toward achievement of the overall program. Health educators in school settings employ the widest range of methods and techniques, more often experiential than passive in approach.

Selection and utilization of community resources (human and material) are essential aspects of the teaching task. Learning activities and outcomes are monitored to ascertain the quality and effectiveness of the program.

Workplace Setting — At the workplace, health education programs are concerned with early detection of illness, or precursor conditions known to lead to serious illness, and lifestyle patterns exhibiting high risk behaviors. For example, employers commonly offer programs that help individuals control overweight and cholesterol levels through diet changes and exercise. Implementation may include disseminating newsletters, flyers, pamphlets, and posters; provid-

ing self help study booklets or computer-assisted instruction; group discussion; or even financial incentives for participation in weight reduction programs, such as dollar rewards per pound lost.

The Competencies

Competency A.
Exhibit competence in carrying out planned programs.

Competency B.
Infer enabling objectives as needed to implement instructional programs in specified settings.

Competency C.
Select methods and media best suited to implement program plans for specific learners.

Competency D.
Monitor educational programs, adjusting objectives and activities as necessary.

Competency A.

Exhibit competence in carrying out planned programs.

Expanded Content Description — Competence in carrying out planned educational programs requires both the skills to present the health information with which the program is concerned, and the interpersonal skills to facilitate communication and promote acceptance of what is to be learned. The method chosen by a health educator in any particular situation is the means by which those two competencies are demonstrated.

Implementation of a program involves carrying out a series of activities designed to effect changes in knowledge, attitudes or behavior determined to be needed by individuals or groups of learners. Learning activities may be termed "interventions," "promotion measures," "strategies," "learning opportunities" or "wellness activities" depending on the setting. The instructional methods and media employed remain constant across settings, as does the need for variety in their application.

RESPONSIBILITY III

Sub-Competencies	*Objectives*
1. Employ a wide range of educational methods and techniques.	• List teaching method and techniques commonly employed with individuals and groups. • Differentiate between cognitive and affective teaching strategies. • Develop a logical sequence of learning activities each of which applies a method of increasing complexity. • Describe the steps taken in the problem solving method.
2. Apply individual or group process methods as appropriate to given learning situations.	• Categorize methods and techniques as individual or group-centered. • Define the term "experiential" as it applies to learning activities. • Explain advantages of experiential activities over passive presentations. • Predict the effectiveness of given instructional techniques as utilized in specific situations. • Demonstrate application of individual and group methods of instruction.
3. Utilize instructional equipment and other instructional media.	• Describe each of the steps necessary for the effective use of audio-visual media. • Identify instructional media designed for individual use. • Explain the strengths and weaknesses of specified types of instructional media.
4. Select methods that best facilitate practice of program objectives.	• Interpret the relationship between educational method and the behavior specified in an objective. • Explain the influence of the content specified in the objective on the choice of method. • Develop an outline of information pertinent to the objective. • Match behaviors specified in objectives with those elicited by the educational method selected. • Compare the efficacy of alternative methods in achieving an objective.

Competency B.
Infer enabling objectives as needed to implement instructional programs in specified settings.

Expanded Content Description — Objectives designed to structure educational programs are written in general terms and intended to organize units of study, rather than single presentations. Each is broadly representative of essential or significant health content and skills. A general objective does not describe an outcome so specific as to be achievable as an end in itself. Instead it serves as the focus of more specific enabling objectives.

When planning learning activities pursuant to achievement of a general objective the question that must be asked is, "What do the learners need to know and be able to do before they can attempt its practice?" The answer to that will always vary depending on the learners in a given situation. They must know the content well enough to be comfortable in dealing with it, but interested in knowing more. They must be capable of employing the skill that is specified by the objective. Enabling objectives define the steps that can bring every learner in the group to a point of readiness for the activity that will enable them to practice working with the subject matter of the general objective.

Sub-Competencies	*Objectives*
1. Pretest learners to ascertain present abilities and knowledge relative to proposed program objectives.	• Describe methods for pretesting learners' cognitive skills and acquired health knowledge. • Interpret test data for use in determining needs for review or preliminary instruction.
2. Develop subordinate measurable objectives as needed for instruction.	• Explain the function of enabling objectives in carrying out educational programs. • Design enabling objectives relative to given general objectives as needed.

Competency C.
Select methods and media best suited to implement program plans for specific learners.

Expanded Content Description — No one method works best for all audiences, or at all times with similar audiences. Nor is any method appropriate in certain settings only. Each method -- lecture, group discussion, games, simulations, audiovisual presentations, or mass media campaigns -- can be adapted for effective use in any number of settings. The selection of method rests upon much more than study of the program plan. More information is needed. What is the nature of the learners who are to be the audience? What equipment and materials are available for use? How much time has been allocated to the program? Which of the methods provides practice in skills equivalent to those specified in the objective? These are a few of the questions that need to be answered. In sum, what is there about this audience and program purpose that favors certain methods over others? The choice of best method is always situational.

Sub-Competencies	*Objectives*
1. Analyze learner characteristics, legal aspects, feasibility and other considerations influencing choices among methods.	• Identify reliable sources of information about the program and its target audience. • Survey available data descriptive of specified learners. • Identify constraints and facilitators of the proposed program. • Synthesize background information about learners and setting in choosing appropriate methods and media.
2. Evaluate the efficacy of alternative methods and techniques capable of facilitating program objectives.	• Compare proposed program outcomes with practice afforded by means of alternative methods. • Develop and apply criteria for choosing among promising alternative methods for implementing a program.
3. Determine the availability of information, personnel, time and equipment needed to implement the program for a given audience.	• Describe the use of media in promoting achievement of educational programs. • Explain the role human and material resources play in carrying out a program. • Identify factors that must be considered or countered in implementing proposed programs. • Match program efforts with materials needed to achieve them.

Competency D.

Monitor educational programs, adjusting objectives and activities as necessary.

Expanded Content Description — To monitor an educational program is to check how well the objectives are being met with a view to appraising its success as a whole or in part. The needs and interests of the learners often shift in intensity or direction. When carried out, the planned activities may be less appropriate to the objectives than intended. They may be too elementary or they may be too complex for the group. Either the behavior or the content may be irrelevant to that stipulated by the objective.

The applicability of the resources and materials chosen for use in the program may be tenuous. A health education program must be routinely scrutinized during and following its implementation, never simply carried out as planned without further question or examination of results. An instructor or facilitator must be sensitive to its strengths or weaknesses and quick to make changes where the latter are evident.

Sub-Competencies	*Objectives*
1. Compare actual program activities with the stated objectives.	• Compare the subject matter and skills practiced in program activities with those specified in the objectives. • Eliminate or revise discrepant activities.
2. Assess the relevance of existing program objectives to current needs.	• Review current needs assessment data related to the target audience. • Identify needs either not being met or no longer critical to the program.
3. Revise program activities and objectives as necessitated by changes in learner needs.	• Develop or delete objectives as needed to reflect current needs. • Devise or revise program activities in accordance with updated objectives.
4. Appraise applicability of resources and materials relative to given educational objectives.	• List sources of reliable health-related resources and educational materials relative to the subject matter for a given program. • Evaluate the applicability and currentness of resource materials for use with specified learners.

AREA OF RESPONSIBILITY IV

Evaluating Effectiveness of Health Education Programs

THE ROLE

Evaluation begins with the program objectives. Program objectives tell us where we intend to go. Evaluation tells us whether we got there, and if we didn't get there provides clues to changes we might make to improve program effectiveness. When a health educator establishes program objectives and decides how they are to be evaluated, the process is begun.

Three kinds of evaluation are important: outcome evaluation, impact evaluation and process evaluation. Outcome evaluation is a long term undertaking and requires large population samples. Of most concern to the health educator are impact and process evaluation. Impact evaluation is the measurement of immediate changes occurring as the result of a health education program. For example, has the program brought about significant changes in knowledge, attitudes, or health practices? Process evaluation helps to identify the causes of a program's strengths or weaknesses and to indicate modifications that are needed to improve the program. One might want to know, for example, why a clinic program was not reaching the intended audience and discover that the clinic hours were not synchronized with the clients' hours.

Another way of looking at process is to compare two programs. For example, is a stress management program whose participants are grouped according to external locus of control test scores more successful than a program whose members are randomly grouped? Does a lesson plan that provides field practice lead to a higher level of competence than the same plan lacking the field experience?

Community Setting — In the community setting, the educator may want to evaluate the effectiveness of a program designed to motivate parents to take their children to neighborhood clinics for immunization against measles. Evaluation of the health education program requires data regarding the number of parents who take their children to the clinics, and the location of those facilities in the community. These data would provide a measure of the impact of the program on the health-related behavior of parents. If these data were compared with data on the incidence of measles, pockets of non-conformance could be identified and program efforts in those neighborhoods strengthened. Program efforts are thus assessed and if necessary, the program is modified.

Medical Care Setting — Evaluation by a health education department in a health maintenance organization has revealed that patients in diet-change classes often experience immediate success but are not always able to maintain the change following the end of the classes. That is, a link between the new behavior and future behavior has not been achieved. A review of needs assessment data reveals that most such patients lacked family or peer support of their new diet behavior. Program modification involved the inclusion of family members or housemates in the classes, and new peer networks were established and encouraged to meet after classes terminated.

These examples illustrate various functions of evaluation in different practice settings. The final task of the evaluator is always to interpret the results of the evaluation and to report or record the findings appropriately.

School Setting — In the school setting, evaluation is not a sometime thing. A health educator stipulates learning objectives in advance of instruction and devises evaluation activities to match. Impact evaluation in schools seeks to assess the level of achievement attained by the students; the effectiveness of the instruction; and the success of the program. Results of the same impact evaluation procedures can be used for formative or summative purposes, depending on the breadth of the content encompassed by a test or activity. The information generated by evaluation of health instruction is recorded as evidence of student progress in learning. Used formatively, those data tell the students how well they have performed and if there are weaknesses, pinpoints what they are. Summative purposes employ data in a wider view of a student's overall performance at the end of a unit or a course. Evaluation data are used formatively by instructors as the basis for revisions in course methodology and/or objectives, and summatively as the basis of grading or self evaluation.

Workplace Setting — At the workplace, the effect of education on proper lifting among employees could be evaluated. Achievement could be assessed by knowledge tests, and observed performance of the correct use of the body for safe lifting. Such information would indicate the impact of the health education program on behavior changes among the workers. Measurement to determine if a reduction in absenteeism due to back injury results, and if health insurance costs due to back injury decrease would indicate the extent to which the objective had been attained.

THE COMPETENCIES

Competency A.
Develop plans to assess achievement of program objectives.

Competency B.
Carry out evaluation plans.

Competency C.
Interpret results of program evaluation.

Competency D.
Infer implications from findings for future program planning.

Competency A.
Develop plans to assess achievement of program objectives.

Expanded Content Description — Evaluation begins with the selection and specification of the objectives upon which a program is based. Whatever the activities or techniques employed, the learners must be given an opportunity to exhibit the degree to which they have achieved those objectives. Developing a plan to assess achievement of an instructional program is not unlike the steps taken to implement its objectives. The difference is that whereas implementation plans assume that the learners cannot presently carry out the task described by the objective, evaluation plans necessarily assume that they now can.

A plan describes what is to be evaluated, what methods will be applied, and by what standards the results will be judged. Instruments such as knowledge and attitude tests, questionnaires, and self-report inventories are means of measuring achievement objectively. Problem-solving situations, role playing, case studies, and many other activities commonly used for instructional proposes are excellent ways of assessing application and changes in commitment or attitude. No one source of information or method of evaluation can provide sufficient information about learner change or program impact. Methods of evaluation should be varied, and they should as nearly as possible call for performance of the skills proposed by the objectives.

Sub-Competencies	*Objectives*
1. Determine standards of performance to be applied as criteria of effectiveness.	• Define the meaning of effectiveness. • Translate objectives into specific indicators of effectiveness. • Identify standards of performance prescribed by professional organizations.
2. Establish a realistic scope of evaluation efforts.	• Describe a feasible plan for program evaluation. • Distinguish between what can and cannot be evaluated. • Differentiate between impact and outcome evaluation.
3. Develop an inventory of existing valid and reliable tests and instruments.	• List sources of published health education survey evaluation instruments. • Identify instruments developed and validated by individual researchers. • Explain advantages and disadvantages of home made versus commercially prepared instruments.
4. Select appropriate methods for evaluating program effectiveness.	• Describe the range of methods and techniques used for educational measurement and evaluation. • List alternative methods for evaluating achievement of specific objectives.

Competency B.
Carry out evaluation plans.

Expanded Content Description — Development of a plan is but one step in the evaluation process. Until that plan is implemented it's only a lot of words printed on a piece of paper. Plans need to be evaluated, too. The best way to find out if it does what it purports to do, is to administer it, analyze the results, and see if it worked. If it worked, you have some feedback on the effectiveness of the program. If it didn't, you ought to be able to pinpoint the areas of weakness that need to be fixed.

Health educators need to know how to devise and administer measurement instruments and evaluation procedures. They also need to be able to organize the resulting data for computer-assisted analysis if this is appropriate.

Sub-Competencies	*Objectives*
1. Facilitate administration of the tests and activities specified in the plan.	• List steps involved in implementing evaluation plans. • Differentiate between measurement and evaluation.
2. Utilize data collection methods appropriate to the objectives.	• Devise evaluation activities that require understanding of the subject matter specified in the objectives. • Match behaviors specified in objectives with those required by evaluation.
3. Analyze resulting evaluation data.	• List steps in recording and analyzing obtained data. • Define basic statistical terminology. • Describe processes involved in statistical analysis of data. • Tabulate collected data as required for computer-assisted or other means of analysis.

Competency C.
Interpret results of program evaluation.

Expanded Content Description — The more long-range the purpose of a health education program, the more complex the results are apt to be. Measurements are often reported in statistical terms — the mean, the mode, variances, standard deviations, reliability coefficients, levels of significance and more.

Interpretation of evaluation results involves two separate but closely related efforts on the part of the evaluator. First, what do those statistical words mean in simpler English and in real application? Secondly, what can safely be concluded about the effectiveness of a program as a result of the evaluation? Currently, long range health program objectives are being written in such a way as to serve as their own criteria of effectiveness. An example of such specific, measurable, but long range objectives is: "By 2000, at least half of all people ages 15 and older should be able to identify the major categories of environmental threats to health and note some of the health consequences of those threats."

Sub-Competencies	*Objectives*
1. Apply criteria of effectiveness to obtaining results of a program.	• Compare post instruction performance measurements with pretest scores. • Identify instructional gaps between program activities and stated learning objectives. • Describe ways program effectiveness might have been enhanced.
2. Translate evaluation results into terms easily understood by others.	• Present evaluation findings in the form of graphs and charts appropriate to the data. • Communicate outcomes in language comprehensible to the lay public.
3. Report effectiveness of educational programs in achieving proposed objectives.	• Contrast the results of norm- and criterion-referenced evaluation. • Define variables affecting valid interpretation of the data. • Describe weaknesses in an evaluation design that limit its generalizability. • Identify significant deviations from expected results of a program.

Competency D.

Infer implications from findings for future program planning.

Expanded Content Description — Interpretation of results is a basic step toward inferring implications for future program planning. Questions that need to be asked include: Which are the programs or parts of programs that need to be modified or perhaps abandoned entirely? Is it the objectives that need to be revised or re-thought, or are the methods being employed to implement those objectives inappropriate or ineffectual? Consider the evaluation activities themselves. Were the instruments and the means employed by the evaluation valid and reliable? Is there a need for other kinds of evaluation data before making decisions about program revision?

Sub-Competencies	*Objectives*
1. Explore possible explanations for important evaluation findings.	• Explain strengths and weaknesses of commonly used data collection methods. • Realize that uncontrolled variables can bias findings either positively or negatively.
2. Recommend strategies for implementing results of evaluation.	• Identify implications from evaluation findings for future programs or other activities. • Differentiate between formative and summative evaluation data. • Describe ways program activities could be improved based upon evaluation results. • Explain the inter-relationships among objectives, learning activities, and evaluation strategies.

AREA OF RESPONSIBILITY V

Coordinating Provision of Health Education Services

THE ROLE

Coordination is a major component of program implementation. The health educator is responsible for establishing open communication and a supportive climate among individuals and groups who assume the tasks of implementation. Acting as a coordinator means that a person mobilizes and makes sure the necessary resources and services are available and operating in order to promote smooth program implementation. The health educator also develops and conducts inservice training sessions for teachers, nurses, physicians, volunteers and other interested personnel.

Community Setting — In the community setting, health educators organize task forces to determine the need for education about such problems as alcoholism or sexually transmitted diseases. In facilitating such community task forces, they organize meetings, seek alternative solutions if differing viewpoints emerge, and keep the participants informed on new program developments. Health educators work with other organizations to determine how a particular planned program (e.g., educating for the prevention of child abuse) might be coordinated with their ongoing programs or how program resources could be shared.

Medical Care Setting — In the medical care setting, a hypertension program has been planned. The health educator's coordination function is to serve as liaison among individuals and groups within the clinic or hospital, explaining how the program will be conducted. This responsibility also includes the preparation of materials for those professionals who will be involved in the program, the scheduling of facilities and equipment, and maintaining open communication among small group facilitators.

School Setting — In the school setting, the health educator coordinates the planning and implementation of the health curriculum, in cooperation with the designated curriculum specialist for the school or district. Since the principal or another school official assigns classrooms, the health educator is not likely to be involved in scheduling facilities. Health educators often arrange for classroom presentations by health organizations and other community agencies.

Workplace Setting — Assume that the accident rate has significantly increased in the past year at an oil refinery plant. The health educator would meet with the occupational safety and medical staff to discuss absenteeism rates, insurance costs, workmen's compensation and related employee morale problems. Further meetings with supervisors, safety engineers, and employee representatives would be necessary to seek solutions to the problem. The health educator obtains or designs an appropriate program, arranges facilities, selects qualified speakers, disseminates promotional materials and schedules meetings at the most convenient times for employee participation.

THE COMPETENCIES

Competency A.
Develop a plan for coordinating health education services.

Competency B.
Facilitate cooperation between and among levels of program personnel.

Competency C.
Formulate practical modes of collaboration among health agencies and organizations.

Competency D.
Organize in-service training for teachers, volunteers and other interested personnel.

Competency A.
Develop a plan for coordinating health education services.

Expanded Content Description — Successful planning of services depends on the gathering of appropriate resources, the selection of qualified personnel and the scheduling of facilities. The coordination of services means that the type and quality of services selected will contribute to and complement the program objectives. Health educators need to know how to determine the existence and availability of health education as well as the extent or amount of overlapping of services that exists. Overlapping means that a service coincides with another or that there is duplication.

Sub-Competencies	*Objectives*
1. Determine the extent of available health education services.	• Explain procedures for locating available resources. • Describe barriers to identifying and contracting health education services.
2. Match health education services to proposed program activities.	• Develop criteria for selecting services to meet a variety of needs. • Describe a process for judging the match between available services and program objectives. • Identify organizational influences that may affect coordination of services.
3. Identify gaps and overlaps in the provision of collaborative health services.	• Interpret the meanings of gaps and overlaps in relation to health education services. • Describe types of health education services that have potential for overlapping its other service.

Competency B.

Facilitate cooperation between and among levels of program personnel.

Expanded Content Description — Planned services generally include using a variety of human resources (e.g., physicians, nurses, physical and occupational therapists, exercise physiologists, nutritionists and statisticians). Success of the delivery of service is dependent on those who facilitate the cooperation between participating staff and those who have authority over the services. The health educator, as a facilitator, often functions quietly in the background, establishing an environment conducive to sharing. Health educators must know how to develop formal (e.g., committees, memoranda) and informal (e.g., social) channels of communication, and how to resolve any conflicts that arise among program personnel through mediation, arbitration or negotiations. Health educators must be able to distinguish between individuals who are innovators and contribute to effective coordination of services and those who block and interfere with collaborative efforts. As a liaison person, the health educator serves to foster cooperation among the personnel of health education services and the outside groups and organizations that may request their services.

Sub-Competencies	*Objectives*
1. Promote cooperation and feedback among personnel related to the program.	• Identify workable channels of two-way communication among staff members. • Explain methods for establishing cooperation among those responsible for health education programs. • Describe available mechanisms for obtaining program feedback. • List steps necessary to develop effective communication feedback mechanisms.
2. Apply various methods of conflict reduction as needed.	• Distinguish among mediation, arbitration and negotiation methods of conflict reduction. • Describe methods for reconciling differences in approach, timing and effort among individuals and groups. • Identify verbal and non-verbal communication strategies or behaviors that can diminish or prevent conflict in human interaction. • Accept the force of personal values as influences on interpersonal behaviors.
3. Analyze the role of health educator as liaison between program staff and outside groups and organizations.	• Interpret the role of liaison as it relates to promotion of cooperative efforts. • Describe the nature and scope of the liaison function. • Explain the processes involved when one acts as a liaison person.

Competency C.

Formulate practical modes of collaboration among health agencies and organizations.

Expanded Content Description — The health educator serves as a facilitator among the providers, consumers, administrators, and other special interest groups who wish to establish programs, reorganize existing programs, or bring about behavioral change. A high degree of skill in organizing, setting time schedules and initiating action plans is needed in working with health professionals who may be asked to provide health education services and activities to others. Collaborative action is facilitated when interpersonal skills involving dyad communication and small group processes are utilized.

Sub-Competencies	*Objectives*
1. Stimulate development of cooperation among personnel responsible for community health education programs.	• Describe techniques for developing open communication and positive interpersonal relationships. • Distinguish among facilitator, innovator and blocker roles in an organization. • Illustrate methods for assisting individuals and organizations with differing viewpoints to understand the issues in question.
2. Suggest approaches for integrating health education within existing health programs.	• Explain ways for calling health education to the attention of health program planners. • Analyze the format of organizational programs as potential vehicles for health instruction. • Identify logical points of entry through which health education can be integrated into other programs.
3. Develop plans for promoting collaborative efforts among health agencies and organizations with mutual interests.	• Interpret the meaning and function of collaboration. • Identify distinguishing features of objectives, purposes and position issues of selected health agencies and organizations. • Describe ways of communicating the distinguishing features of given health organizations to others with related goals.

Competency D.
Organize in-service training for teachers, volunteers, and other interested personnel.

Expanded Content Description — Health educators are often called upon to do training. In-service training is a type of teaching and a form of staff development in which the learners typically are teachers of various disciplines, volunteers, health professionals and other interested individuals. The emphasis of the training sessions is usually on the process -- how to establish meaningful health education objectives and how to use appropriate health education methodology. The learners are assisted to increase their knowledge, improve teaching skills and examine their present perceptions and attitudes toward health and health behaviors.

Sub-Competencies	*Objectives*
1. Plan an operational, competency oriented training program.	• Identify learner needs for information and skill development. • Design feasible and measurable in-service training objectives. • Devise criteria for the selection of personnel qualified to conduct in-service programs.
2. Utilize instructional resources that meet a variety of in-service training needs.	• Identify educational resource materials that meet specialized needs of given target groups. • Formulate criteria for appraising the applicability of resource materials. • Explain the need for developing proficiency in the use of educational resources.
3. Demonstrate a wide range of strategies for conducting in-service training programs.	• Explain the inter-relationship between choice of instructional methods and learner success.

AREA OF RESPONSIBILITY VI

Acting as a Resource Person in Health Education

THE ROLE

The setting within which health educators function largely determines the nature of the resources that are provided. Health educators often serve as human clearinghouses for health information. They must be aware of a variety of community resources and familiar with computer-based retrieval systems such as Dialog and other national on-line databases such as the National Institute of Education's ERIC (Educational Resources Information Center), the National Library of Medicine's MEDLINE and other databases such as the National Health Information Clearinghouse (NHIC). Using resources such as these they can locate, review, select, and organize a variety of health education resources to satisfy specific requests.

In working with other health professionals, health educators often serve as consultants, procure educational materials and human resources, and make referrals to appropriate services. They describe the services of community health organizations and associations and advise on the need for and planning of health education programs.

Community Setting — In the community setting, health educators might be asked to serve on county-wide drug abuse councils. They would make available data from research studies, recommend relevant literature, suggest audiovisuals and educational pamphlets and posters for distribution, and report on successful drug prevention and intervention programs being conducted elsewhere.

Medical Care Setting — A health educator in the medical care setting could serve as a consultant to a nursing staff in developing a cancer education program for patients and their families. The health educator organizes a multidisciplinary group to identify needs for patient education materials, sets up a retrieval system for locating relevant materials and evaluates their applicability and effectiveness.

School Setting — A health educator in the school setting would participate in the work of a curriculum committee formed to identify and choose sexuality education materials that would be in compliance with state legislative mandates and school district policies. The health educator might be asked to assist the committee members in examining state laws and codes, establishing criteria for the evaluation of such materials and recommending placement of the topic in the overall curriculum plan. After selection of the material, the health educator might also arrange preview sessions for interested parents.

Workplace Setting — Physical fitness/exercise programs are frequently featured in workplace health promotion programs. As a resource person, the health educator would be responsible for explaining to both employers and employees the costs and benefits of such exercise programs. Health educators can identify and organize resources needed for the implementation and continuation of the fitness or other health promotion programs. They can identify research data to present to concerned personnel such as the corporate medical staff, and monitor the plans of those responsible for conducting the exercise program to ensure that its activities match the stated objectives.

THE COMPETENCIES

Competency A.
Utilize computerized health information retrieval system effectively.

Competency B.
Establish effective consultive relationships with those requesting assistance in solving health-related problems.

Competency C.
Interpret and respond to requests for health information.

Competency D.
Select effective educational resource materials for dissemination.

Competency A.
Utilize computerized health information retrieval system effectively.

Expanded Content Description — Data-based retrieval systems provide the means for the health educator to obtain computer-filed bibliographical data and to identify sources of existing health information. An extraordinary number of systems are available for retrieval of individual sources or combinations of several sources and topics. Data-based retrieval systems include basic indexes and abstracts. Clearinghouses are central agencies that collect, classify and distribute health information. The National Health Information Clearinghouse contains a database of entries on health-related organizations and programs. It is a system for referring inquirers to appropriate sources. Health educators must be computer-literate, know how to access such systems, and interpret and communicate obtained information and data.

Sub-Competencies	*Objectives*
1. Match an information need with the appropriate retrieval system.	• List health-related retrieval systems and clearinghouses. • Explain the process for obtaining data to match specified health information needs.
2. Access principal on-line and other database health information resources.	• Demonstrate basic computer literacy skills. • Describe advantages of on-line versus manual computer searches.

Competency B.

Establish effective consultive relationships with those requesting assistance in solving health-related problems.

Expanded Content Description — Consultation is the process by which the experience and knowledge of one person is shared with others in solving problems more effectively. The purpose of consultation is to provide assistance to those requesting help. Consultative services focus on human relationships and the offering of technical assistance. Health educators often serve as formal or informal consultants to health professionals of many kinds. Implicit in formal consulting is the notion that the health educator is the technical or process expert. When functioning as an informal consultant, the health educator provides information, identifies resources and services and interprets obtained data.

Sub-Competencies	*Objectives*
1. Analyze parameters of effective consultative relationships.	• Define the nature and scope of health consultation. • Distinguish between formal and informal consultation. • Describe methods for establishing consultative relationships.
2. Describe special skills and abilities needed by health educators for consultation activities.	• Identify areas of emphasis unique to the preparation and experience of health educators. • Assess individual needs for skill development in providing consultative services. • Explain the limitations to the role of health educator as counselor.
3. Formulate a plan for providing consultation to other health professionals.	• Interpret the significance and meaning of consultative requests. • Explain ways of developing satisfying consultative relationships.
4. Explain the process of marketing health education consultative services.	• Describe effective avenues for health education consultations. • Identify sites and facilities appropriate for consultation work.

Competency C.
Interpret and respond to requests for health information.

Expanded Content Description — The referral process includes acknowledging requests and helping requesters to define what it is that they really want. Health educators must be realistic about the amount of time and effort to spend when responding to a request. There are different levels of requests, with some taking considerable time to complete and others requiring a minimal amount of time. Factors that affect how a health educator interprets requests include such things as health misconceptions held by the requester.

Sub-Competencies	*Objectives*
1. Analyze general processes for identifying the information needed to satisfy a request.	• Explain the procedures involved in the referral process. • Describe formal and informal methods of responding to requests for information. • List factors that affect the interpretation of health information requests.
2. Employ a wide range of approaches in referring requesters to valid sources of health information.	• Differentiate between health information and education. • Compare ways of systematically responding to health information requests.

Competency D.

Select effective educational resource materials for dissemination.

Expanded Content Description — Educational resources available to enrich health education learning experiences are numerous and varied in type, format, and focus. Types of resources include printed materials (e.g., brochures, pamphlets, games, booklets, journals, newspapers and newsletters), audio-visuals (e.g., films, filmstrips, slides, video-tapes and video-discs), and interactive media (e.g., computer software and printed instructional programs). Educational materials are obtainable from voluntary agencies, federal and state governments, professional organizations and societies, commercial film companies, non-profit organizations and foundations, and educational institutions. Many of the materials are free, inexpensive or can be rented. In selecting the appropriate resources, the health educator takes into consideration the reading level and sociocultural background of the target population for whom the materials are intended. Policies within or outside an organization exist that affect the distribution and utilization of materials. The health educator must know how such policies affect the dissemination and use of educational resources.

Sub-Competencies	*Objectives*
1. Assemble educational material of value to the health of individuals and community groups.	• Identify easily understood resource materials relevant to current community health needs. • Categorize health resource materials according to applicability for use with individuals or groups.
2. Evaluate the worth and applicability of resource materials for given audiences.	• Develop criteria for judging applicability of resource materials. • Explain practical limitations in acquiring or delivering health resources.
3. Apply various processes in the acquisition of resource materials.	• Coordinate procurement procedures for obtaining needed resources. • Identify budgetary factors that affect the acquisition process.
4. Compare different methods for distributing educational materials.	• Describe methods of distributing educational materials efficiently. • Identify internal and external policies influencing the selection and distribution of resource materials.

AREA OF RESPONSIBILITY VII

Communicating Health and Health Education Needs, Concerns, and Resources

THE ROLE

Health educators provide information regarding health and health education to a varied market of health providers, consumers, learners, employers and colleagues. They do this through mass communication techniques and individual and group processes. Health educators, in interpreting health information needs and concerns, utilize their professional backgrounds in the behavioral and biological sciences. They articulate the purposes, theories, concepts and processes of health education to others in a manner appropriate to the setting in which they practice. The health educator, taking into consideration the multitude of value systems represented in our society, uses a variety of educational strategies in communicating health information.

Community Setting — A health educator might be asked to be responsible for collecting, refining, and organizing data for advisory council meetings. The information might be transmitted by means of written reports, slide presentations, or by charts and graphs. As a staff member, a health educator would be expected to make the information quickly available and easily comprehensible for use by council members in their decision-making process.

Medical Care Setting — Suppose a health maintenance organization decides to establish a prenatal education program for subscribers in need of such information. The health educator would be involved in communicating the need for such a program to various members of the medical staff and to the subscriber population of the HMO. For example, the health educator would be asked to prepare brochures to advertise the program and to develop posters and flyers for distribution to each clinic as means of explaining program objectives and proposed activity schedules. The health educator, as a specialist in curriculum/program development and implementation, would play a major role in designing the instructional elements of the program.

School Setting — A health educator in the school setting may be asked to present the school district's health education curriculum to the PTA, school board or community citizen groups. An explanation of curriculum goals and objectives would likely precede a description of the philosophical basis of the program. In making a public presentation, the health educator might use videotapes of classroom instruction, transparencies listing program objectives and handouts of sample lesson plans to illustrate key aspects of the plan.

Workplace Setting — In the workplace setting, the management of a high-technology business endorses the establishment of a training program to help mid-level managers to cope more effectively with stress-related health problems. A health educator would be expected to explain to those managers the company's concern for their well being and their perceptions of its cost-effectiveness as well. In turn, the health educator might relay to the executive level whatever concerns or interests the managers would have expressed relative to the proposed program.

The Competencies

Competency A.
Interpret concepts, purposes and theories of health education.

Competency B.
Predict the impact of societal value systems on health education programs.

Competency C.
Select a variety of communication methods and techniques in providing health information.

Competency D.
Foster communication between health care providers and consumers.

Competency A.

Interpret concepts, purposes and theories of health education.

Expanded Content Description — The content, or subject matter, of health education is derived from the biological, sociological and psychological sciences. The goal of health education centers around the promotion of wellness with subsets of mental health, physical well being, human growth and development, family relationships, consumer health, safety, disease control and prevention of health problems. Health educators utilize educational strategies to bridge the gaps between scientific discoveries and information and their applications in the life of the learner. They must know how to apply learning and social change theories in relation to health and health-related topics in order to help people adopt positive health practices and to develop attitudes that promote positive health behaviors. Health educators must learn to distinguish between the different theories and concepts of health education and to select those that are most appropriate for the setting in which they practice. Individual counseling, group facilitation, community organization, values clarification, and classroom instruction are a few of the processes employed as means of communicating information and promoting the value of a healthful lifestyle.

Sub-Competencies	*Objectives*
1. Evaluate the state-of-the-art of health education.	• Define health education as a discipline and a profession. • Name the primary goals of health education. • Identify variations in health education objectives and methodology according to setting.
2. Analyze the foundations of the discipline of health education.	• Explain psychological, sociological, anthropological and educational determinants of health behavior. • Interpret biological aspects of health and health education. • Investigate the historical basis of health education.
3. Describe major responsibilities of the health educator in the practice of health education.	• Distinguish among health promotion, disease prevention and disease control. • Differentiate among instructional processes effective in working with individuals and groups. • Explain ways individual and group values influence the practice of health education.

Competency B.

Predict the impact of societal value systems on health education programs.

Expanded Content Description — Professional integrity is shaped by one's own values as well as respect for those of others. Individual value systems are unique combinations of the beliefs, practices and knowledge held by the group, tempered by personal experience. Controversy arises when there are opposing viewpoints relative to health behaviors. Viewpoints based upon beliefs and popular practice may or may not be scientifically sound. Health educators have to know how to establish a professional relationship with individuals and groups who hold strong beliefs based on outdated or inaccurate information. The health educator must also be alert to practices that may discriminate against certain races, religions, sexes, ages, cultural backgrounds or socioeconomic levels. The health educator must be sensitive to the differences between education and manipulation. Education requires that learners have opportunities to explore alternatives that are reasonable yet compatible with their value systems. Manipulation depends upon the learner's being controlled or led to conclusions more nearly reflecting the values of the health educator. It is important for the health educator to establish an accepting atmosphere that seeks to educate rather than to manipulate the learner.

Sub-Competencies	*Objectives*
1. Investigate social forces causing opposing viewpoints regarding health education needs and concerns.	• Identify social forces that shape personal and group value systems. • Propose ways of resolving controversy regarding health education programs. • Anticipate opposition when planning health education communications.
2. Employ a wide range of strategies for dealing with controversial health issues.	• Describe educational strategies that diminish the possibility of disruptive controversy. • Distinguish between manipulation and education as approaches to health education. • Explain non-discriminating practices in providing health education and services.

Competency C.
Select a variety of communication methods and techniques in providing health information.

Expanded Content Description — Health and health education needs and concerns are communicated to community, legislative, organizational, and other designated groups by means of a combination of written, verbal and visual techniques. The transmission of program components, concepts, purposes and facts can be imparted or delivered through the mass media (e.g., television, radio, newspaper) and public lectures. It is essential that health educators be skilled in the use of 1) a wide variety of media such as films, overhead and slide projectors, video and audio tape recorders, and word processors; 2) visual communication technology (e.g., computer graphics, microcomputers); and 3) word processing techniques.

Sub-Competencies	*Objectives*
1. Utilize a wide range of techniques for communicating health and health education information and education.	• Establish criteria for choosing effective communication methods. • Describe successful communication techniques. • Explain strengths and limitations of various communication techniques. • Identify techniques appropriate for disseminating needed health information to specified groups. • Predict the impact on the learner through use of particular communication devices.
2. Demonstrate proficiency in communicating health information and health education needs.	• Describe ways to present verbal, written and graphic health-related data. • Illustrate elements necessary to effectively deliver oral and visual presentations. • Explain unique usage of microcomputers and word processors for health instruction. • List steps in conducting successful group discussions.

Competency D.

Foster communication between health care providers and consumers.

Expanded Content Description — As consumers have become more active in accepting responsibility for their own health care needs, the relationship between the consumer and their providers has changed. Health educators can promote understanding and consumer cooperation and satisfaction in several ways. For example, by publishing informative articles in professional and lay publications; by sponsoring conferences, seminars or lecture series dealing with health needs or concerns of great interest to the public; by making appearances on television talk shows and news programs; and by preparing and arranging for wide distribution of newsletters, posters, flyers and news stories that address issues of interest to both consumers and providers.

Sub-Competencies	*Objectives*
1. Identify the significance and implications of health care providers' messages to consumers.	• Identify factors that influence an individual's acceptance of health information and services. • Utilize educational vehicles as conveyors of health information intended for the consumer.
2. Act as liaison between consumer groups and individuals, and health care provider organizations.	• Describe ways that facilitate provider response to consumer needs. • Organize health care consumer need survey data for distribution to providers.

Conclusion

A CONTINUING TASK FOR health education is the application of its field of knowledge and its professional practice. Although a field of knowledge and a professional practice are not the same thing, both are basic concerns. The purpose of practice is to bring about advances, whether in knowledge, attitudes or practices. The purpose of professional preparation is to provide prospective health educators with the knowledge and skills required to practice in any of four major settings. The competencies, sub-competencies and learner objectives in the framework of responsibilities outline the skills necessary to the practice of health education.

The *Framework* sets forth the standards of responsibility, and is not a curriculum. A curriculum is the content used to convey concepts. The decisions and actions that must be taken to translate a competency-based framework into an effective curriculum depend upon the faculty responsible for the design and instruction of the body of knowledge.

A philosophy of health education and a code of ethics underlie the professional judgments health educators must make as they deliver their services. Because ethics and values are not directly performance measured, attention to them is especially important in a competency-based curriculum. The development of these crucial dimensions of the competent health educator must be planned and never left to assumption.

"Competence" is an expectation that is used to describe clusters of skills and understandings that are recognizable and measurable. The competencies are not fixed, but are open to growth and to change.

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Appendix A: How to Use the CHES Responsibility Matrix

Direction for Use of the Area Matrices

A separate matrix is provided for each of the seven areas of responsibility. In the indicated column on each of the matrices, enter the course number and title of each professional preparation course required of health education majors enrolled in your program. Each course listed should be reported and rated only by faculty currently responsible for its instruction, whether the course is taught by faculty within or outside the department.

Referring to the competencies and sub-competencies, the instructor is to indicate whether or not each of the sub-competencies is currently being taught as an integral part of the specified course. Remember that a competency statement is not just some amount of subject matter preceded by a behavioral skill. The statement must be viewed as a whole. The question each instructor must answer in connection with every competency and sub-competency specified in the area matrices is "Are the students taking this course learning to perform the described competency, or are they merely learning associated subject matter?" Obviously, the instructor of each course is more qualified than any other faculty member to make that judgement, and that means that every instructor is involved in collecting each of the matrices, but only in regard to the course or courses for which he or she is responsible.

How Responses Are to be Recorded

If a sub-competency is given major emphasis and practice as part of a course, the instructor places the number 2 in the corresponding box. If the sub-competency

receives at least minor study and practice in the course, the number 1 is inserted in the same manner. In the event that a sub-competency is not a part of the study of that course, a zero is inserted in the same way. Figure 1 illustrates such an analysis of four exemplary health education courses.

As each matrix is completed, total the recorded data to answer the following questions: (1) Of the possible number of sub-competencies listed for the area, how many are being addressed to some degree? (2) Are there any sub-competencies or competencies not touched upon by any course in the program? (3) Which of the courses contribute most to achievement of the competencies identified as essential in carrying out the responsibility?

Directions for Use of the Horizontal Matrix

When all of the area matrices have been completed, the eighth, or horizontal analysis chart, is used as an organizing, summarizing tool. The horizontal analysis matrix is designed to facilitate organization of the combined data obtained by means of the seven area matrices. The same courses that appeared on the area matrices are listed along the vertical axis. The data recorded on the seven area matrices should be transferred by the department chair or designate.

Notice that for each area, the competencies are indicated by letters "A, B, C or D" and so on across the horizontal axis. Below each letter, the total number of supportive sub-competencies is indicated in parentheses as 4,3,2 and so on.

Now referring in turn to each completed area matrix, and for every course listed, enter the number of sub-competencies given a "2" rating and the number of those given a "1" rating in the appropriate box (see Figure 2). As an example, suppose that of four sub-competencies specified as essential to achievement of Competency A, Area I, the instructor of a course has reported that two of them receive major emphasis and the other two are given at least some emphasis. The number given major emphasis (in this case 2) is entered in the top portion of the box, and the number given minor emphasis (which is also 2) is entered in the lower portion so that it looks like a fraction (2/2). As another example, for Competency B, which has three sub-competencies, none are reported as being given major emphasis, but three are receiving some emphasis. These data would be recorded as (3). Zeros need not be indicated or counted as they contribute nothing to the total scores.

When all of the data have been entered for all of the courses and for all seven areas, total and enter in the column at the right the number of sub-competencies reported as receiving major and minor emphasis with reference to each course. Next, total each column vertically. The resulting figure represents the coverage of *that competency* as the outcome of the entire program. In adding these columns, include both figures of the "fraction," so that 2/2 adds 4 to the total, whereas a fraction like 2/0 would add only 2 to the total.

Consider Competency A, Area I, once again. Because there are four sub-competencies, complete coverage of that competency within a single course would be represented by the number "4." To assess the emphasis given that

competency as the outcome of the entire program of studies, one adds the reported numbers in the appropriate column. Given ten courses, the greatest coverage possible of Competency A would be indicated as "40." For Competency B, with three sub-competencies, the greatest possible coverage for ten courses would be indicated by the number "30."

It is highly unlikely that any one course will encompass consideration of all of the sub-competencies or even all of the areas of responsibility. However, taken together, what should emerge from the matrix survey is a graphic analysis of an existing curriculum through the 26 competencies and the 77 sub-competencies, as well as information regarding the depth to which each of them is being studied. The balance, or lack of it, in time and emphasis accorded each of the areas of responsibility should also be apparent.

Purpose of the Matrix Surveys

The purpose of the matrix surveys is to provide some concrete data concerning the current degree of relevance between existing course content and that implicit in the defined competencies; to identify strengths and weaknesses of a curriculum with regard to information; and to establish a starting point for any subsequent program revisions, adaptations or additions that are decided upon.

The completed horizontal analysis chart provides answers in general to most of the basic questions that curriculum makers might ask about an existing program of courses in light of its potential adaptability to the competency-based plan. If more specific information is needed, the appropriate area matrix will provide some answers. In other words, the horizontal charts might show that two out of three sub-competencies for Competency B, Area 1, are given only minor consideration, and the other one is not covered at all. The area matrix tells you *which* one is omitted and which are those given slight coverage.

Together, the matrices afford curriculum decision-makers quick answers to questions such as the following, and more:

1. How many of the 26 competencies are currently being addressed by the curriculum?
2. How many of the sub-competencies receive major emphasis in the program, as shown by a "2" rating?
3. How many of the sub-competencies receive at least minor study, as shown by a "1" rating?
4. If there are competencies not now receiving any attention at all, which are they and in what area(s) are they found?
5. In each of the areas, how many sub-competencies are not being implemented?
6. Which courses are providing broadest coverage and which are providing least coverage of the seven areas of responsibility?
7. Are there any areas of responsibility that now receive little if any consideration in the curriculum? If so, which ones?
8. Are there courses that appear to be irrelevant to the competencies as

reflected in the number of zeros shown? If so, could this be changed without giving up the course itself?

9. What implications in these data do you see for course revision, course modification or the development of new courses?

It is probable that the data obtained regarding a traditional professional preparation program in health education will show that it is not so much the content of existing courses that would have to be changed in adopting a competency-based plan. Rather, it would be a new perspective on course goals and objectives, as well as an increased use of experiential teaching-learning methods. In any case, practice of all of the competencies for each area of responsibility should be included in some instructional activity in a logically appropriate course.

Adapting and Existing Curriculum

Once the faculty has analyzed each of the courses currently offered and required of prospective health educators, it should be clear what changes will be needed. Each faculty member should be charged with making the revisions necessary to better the fit between his or her course objectives and achievement of the competencies. All of the faculty should participate in planning and designing any new courses deemed necessary to facilitate implementation of competencies now being completely overlooked.

Developing a New Curriculum

All of this discussion has looked at the problem of implementing a competency-based curriculum from the perspective of an already existing program. Where there is no program in existence, the steps would be much the same except that the analyses carried out by means of the matrices would not be possible. In such a situation, the individuals charged with developing a curriculum from scratch would start with the professional preparation curricula recommended by health education authorities and professional groups would suggest an accepted starting point of courses to which the competencies could logically be assigned.

In arriving at decisions about where the competency is to be taught, it is advisable to take an experimental approach. That is, the decisions reached at this point need to be regarded as tentative and subject to change through trial and evaluation by both students and faculty. Several years of evaluation and modifications may be necessary before there is assurance that the curriculum plan is providing all of the learning potential possible. Moreover, it should be remembered that the competency framework presented here is in the same process of evolution. If it were otherwise, then health education would cease to grow and develop as a discipline and as a profession.

Defining Instructional Objectives

Two or more general objectives have been provided for each of the sub-competencies specified within each of the seven areas of responsibility. These objectives are included in Section IV, which presents the competency-based curriculum framework. It is intended that in most cases these will require that more precise, enabling sub-objectives will be needed as guides to the choice of teaching-learning strategies. The development of sub-objectives is the responsibility of the instructor seeking to implement the general objectives inasmuch as the number and kind of subordinate objectives depend upon the needs of specified learners.

Objectives that are operational and carefully designed to facilitate achievement of competencies are actually third-level competencies themselves. They differ in form from the competencies and sub-competencies only in that the content is more narrowly defined and the specified cognitive or affective skill or behavior is measurable. Competency-oriented objectives tend to focus more on process - learning to do versus learning content. They describe an educational outcome that will serve the learner in the future, not simply an activity that is an end in itself. A general objective requires performance of sufficient complexity and breadth that measurement of its achievement can be accepted as representative of the higher level competencies under which it has been subsumed.

Selecting Teaching-Learning Strategies

It is not the function of a curriculum framework to specify or describe learning opportunities or lesson plans. Criteria for the selection of a teaching strategy include those such as (1) it must provide practice in the skill specified in the objective; (2) it must arrange for the discovery or introduction of the content; (3) the activities must be satisfying to the learner; (4) the activities must be appropriate to the past experience and present abilities of the learner; and (5) it should be the strategy that among others satisfying those criteria seems the most likely to produce more than one positive outcome.

In general, experiential learning is more effective in promoting competency than is passive learning. Everybody learns better by doing than by watching or listening. All in all, the best teaching-learning strategy is the one that encourages learners to practice doing what the objective proposes that they need to learn to do.

The Competency Framework by Areas of Responsibility

Each of the seven areas of responsibility, of which the competency-based curriculum framework is composed, is introduced by a discussion of the area itself. A general statement describes the responsibility in broad terms: its purpose, its meaning, the forms it takes in health education and its relation to the other areas.

The competency framework for each area is developed hierarchically as a set of competency statements, each of which is supported by more specific and more narrowly drawn sub-competencies, upon which in turn measurable general objectives are based and proposed. The sequence in which the areas of responsibility are presented here is more or less logical, not absolute. No priorities are intended, nor should any be presumed.

Figure 1
Example

Area of Responsibility I Matrix

Assessing Individual and Community Needs for Health Education

Course Titles	Competency A				Competency B			Competency C		Totals by Course Maximum Sub-competencies=9
	Subcompetencies				Subcompetencies			Subcompetencies		
	1	2	3	4	1	2	3	1	2	
Community Health	*2*	*2*	*1*	*2*	*2*	*2*	*1*	*2*	*2*	*9*
Biostatistics	*0*	*1*	*1*	*0*	*0*	*0*	*0*	*1*	*0*	*3*
Administration	*1*	*0*	*0*	*0*	*1*	*1*	*1*	*1*	*2*	*6*
School Health Program	*2*	*1*	*1*	*2*	*2*	*2*	*2*	*2*	*2*	*9*
Etc.										
								Totals by Area Maximum = 9 times number of courses.		

Code: 2 = Major emphasis; 1 = Minor emphasis; 0 = No emphasis

Figure 2
Example

Horizontal Analysis Sheet: Areas of Responsibility

Course Titles	Area I			Area II				Area III				Area IV				Area V				Area VI				Area VII				Total Sub-Competencies by Course
	Competencies																											
	A	B	C	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	
	Sub-Competencies																											
	4	3	2	4	2	2	4	4	2	3	4	4	3	3	2	3	3	3	3	2	4	2	4	3	2	2	2	
Community Health	2/2	0/3	2/0																									
Biostatistics	0/1	0/0	0/1																									
Administration	0/1	0/3	1/1																									
School Health Program	2/2	3/0	2/0																									
Etc.																												
Subtotals	10	9	7																									
Proposed New Courses																												

Subtotal= Possible coverage of each competency based upon the number of sub-competencies times the number of course titles (for example, given 10 courses, the greatest coverage possible of Area I, Competency A, would be 40).

Example: 2/2 = Major emphasis given to two sub-competencies; minor to two

Area of Responsibility I Matrix

Assessing Individual and Community Needs for Health Education

Course Titles	Competency A				Competency B			Competency C		Totals by Course Maximum = 9
	Subcompetencies				Subcompetencies			Subcompetencies		
	1	2	3	4	1	2	3	1	2	
								Totals by Area Maximum = 9 times number of courses.	

Code: 2 = Major emphasis; 1 = Minor emphasis; 0 = No emphasis

Area of Responsibility II Matrix

Planning Effective Health Education Programs

Course Titles	Competency A				Competency B		Competency C		Competency D				Totals by Course Maximum = 12
	Subcompetencies				Subcompetencies		Subcompetencies		Subcompetencies				
	1	2	3	4	1	2	1	2	1	2	3	4	
Totals by Area Maximum = 12 times number of courses.													

Code: 2 = Major emphasis; 1 = Minor emphasis; 0 = No emphasis

Area of Responsibility III Matrix

Implementing Health Education Programs

Course Titles	Competency A				Competency B		Competency C			Competency D				Totals by Course
	Subcompetencies				Subcompetencies		Subcompetencies			Subcompetencies				Maximum
	1	2	3	4	1	2	1	2	3	1	2	3	4	= 13
	Totals by Area Maximum = 13 times number of courses.													

Code: 2 = Major emphasis; 1 = Minor emphasis; 0 = No emphasis

Area of Responsibility IV Matrix

Evaluating Effectiveness of Health Education Programs

Course Titles	Competency A				Competency B			Competency C			Competency D		Totals by Course Maximum = 12
	Subcompetencies				Subcompetencies			Subcompetencies			Subcompetencies		
	1	2	3	4	1	2	3	1	2	3	1	2	
Totals by Area Maximum = 12 times number of courses.													

Code: 2 = Major emphasis; 1 = Minor emphasis; 0 = No emphasis

Area of Responsibility V Matrix

Coordinating Provision of Health Education Programs

Course Titles	Competency A			Competency B			Competency C			Competency D			Totals by Course Maximum = 12
	Subcompetencies			Subcompetencies			Subcompetencies			Subcompetencies			
	1	2	3	1	2	3	1	2	3	1	2	3	
												Totals by Area Maximum = 12 times number of courses.	

Code: 2 = Major emphasis; 1 = Minor emphasis; 0 = No emphasis

Area of Responsibility VI Matrix

Acting as a Resource Person in Health Education

Course Titles	Competency A		Competency B				Competency C		Competency D				Totals by Course Maximum = 12
	Subcompetencies		Subcompetencies				Subcompetencies		Subcompetencies				
	1	2	1	2	3	4	1	2	1	2	3	4	
Totals by Area Maximum = 12 times number of courses.													

Code: 2 = Major emphasis; 1 = Minor emphasis; 0 = No emphasis

Area of Responsibility VII Matrix

Communicating Health and Health Education Needs, Concerns and Resources

Course Titles	Competency A			Competency B		Competency C		Competency D		Totals by Course Maximum = 9
	Subcompetencies			Subcompetencies		Subcompetencies		Subcompetencies		
	1	2	3	1	2	1	2	1	2	
Totals by Area Maximum = 9 times number of courses.										

Code: 2 = Major emphasis; 1 = Minor emphasis; 0 = No emphasis

Horizontal Analysis Sheet: Areas of Responsibility

Course Titles	Area I			Area II				Area III				Area IV				Area V				Area VI				Area VII				Total Sub-Competencies by Course
	Competencies																											
	A	B	C	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	
	Sub-Competencies																											
	4	3	2	4	2	2	4	4	2	3	4	4	3	3	2	3	3	3	3	2	4	2	4	3	2	2	2	
Subtotals																												
Proposed New Courses																												

Subtotal= Possible coverage of each competency based upon the number of sub-competencies times the number of course titles (for example, given 10 courses, the greatest coverage possible of Area I, Competency A, would be 40).

Appendix B: Glossary of Terms

These words, appearing in the text, are pulled out for clarification.

Affective objectives. Those objectives that reflect some amount of self-direction and that describe feelings or attitudes toward specified subject matter. The objectives are concerned with changing or reinforcing health values, attitudes or interests.

Cognitive objectives. Those objectives that specify an intellectual operation or skill as well as some amount of content or subject matter with which it will be applied. Cognitive behaviors are generally not observable as they are being practiced, but their product can usually be observed and measured.

Competency. An ability to apply a certain specified skill in dealing with some defined amount of meaningful subject matter.

Content. The substantive material (concepts, principles, facts, topics, relationships) to be learned and used in the preparation and practice of a health educator.

Curriculum framework. The basic structure or design of a plan for a curriculum in a given discipline or area of professional preparation. Usually not appropriate or intended for use in developing specific courses or learning activities, it specifies the scope of the plan (the range of organizing elements to be covered, e.g., concepts, content areas, broad areas of study), related instructional objectives and sometimes goals.

Curriculum guide. Commonly, a written document concerned with the instructional plan for a specified topic, course of study or discipline. Included in the plan are a set of long range goals, the objectives, an outline of the essential content, suggested learning opportunities, evaluation activities and lists of resource materials.

Evaluation. A process employed in determining the worth or merit of some thing or phenomenon of interest. In education it is formal and systematic, and primarily carried out with the purpose of making an informed decision.

Formative evaluation. A judgment of worth based upon information gathered during the development of a program. Often in health education it is referred to as "process evaluation." The object or objects of interest can be the learner, the program, the curriculum, the materials, the strategies or even the objectives.

Generic role. The minimum core of areas of responsibilities and competencies common to and essential to the professional preparation of all health educators. The generic role is not merely a synthesis of skills and knowledge presently employed by practicing health educators whatever the work setting, but a new concept of the basic role independent of setting.

Health need. Some thing or behavior that is essential to life, also the degree to which the level of satisfaction of such demands differs from accepted standards. A need may or may not be felt depending on past experience and the value the individual places on its satisfaction.

Health problem. The condition that results when one or more needs are not or cannot be adequately satisfied, or when physical, mental/emotional, social or environmental imbalances threaten assessment; and it is independent of value judgment.

Measurement. The determination of and orderly recording of quantitative data. It is descriptive only, concerned with status assessment and independent of value judgment.

Objectives. Statements describing a desired instructional outcome. As used in this curriculum framework, they are written in terms of proposed measurable cognitive or affective *changes in the learner*, never as descriptive of teacher intentions.

Organizing elements. The integrative threads of the curriculum running through a series of organizing centers. They provide continuity and sequence to the curriculum.

Sub-Competency. A specific ability or skill subordinate to and expected to contribute to accomplishment of a competency.

Summative evaluation. Assessment of the effectiveness or merit of completed health education programs as a basis for decisions regarding their retention or adoption. In health education, also referred to as "impact" or sometimes "outcome" evaluation. Impact evaluation is concerned with immediate changes occurring as the final effect of a health education program, whereas outcome evaluation requires data obtained through assessments of large populations of learners over long periods of time.

Appendix C: A Chronology of Events

1970s

- Accreditation of professional preparation programs existed.

  The National Council for Accreditation of Teacher Education (NCATE) Accredited programs preparing teachers of health education.

  The American Public Health Association (APHA) accredited Masters degree programs in Community Health Education Outside of Schools of Public Health and passed that function on to the Council on Education for Public Health (CEPH) when it was created in 1976. CEPH also accredits Schools of Public Health.

  A Society of Public Health Education Committee (SOPHE) was developing standards for a program approval process for undergraduate community health education.

- No national credentialing of individual health educators existed, although there was growing professional organization activity pointing to the need.

  Several conferences on professional preparation and practice were sponsored by the Association for the Advancement of Health Education (AAHE).

  The SOPHE Committee on Preparation and Practice updated its 1967 report: *Guidelines for the Preparation and Practice of Health Educators* (1976).

  The Coalition of (8) National Health Education Organizations (CNHEO) with funds from the Centers for Disease Control (CDC) issued a report on *Current Status and Needs for Health Education Performance Standards and Recommendations for Action* (1977).

- National professional health education organizations collaborated in a Workshop on Commonalities and Differences in the Preparation and Practice of Health Educators, Bethesda, Maryland, funded by the Health Resources Administration, DHEW (1978).

- The National Task Force on the Preparation and Practice of Health Educators, Inc., was established for the purpose of developing a credentialing system (first Bethesda conference, 1978).

  The initial Role Specification for Entry-Level Health Educators was developed.

- Verification and refinement of role specification began for Health Educators (1980).
- National Conference for Institutions Preparing Health Educators was convened in Birmingham, Alabama; it was supported by funds from the Centers for Disease Control (1981).
- Professional preparation curriculum development began (1981).
- The draft, *A Guide for the Development of Competency- Based Curricula for Entry-Level Health Educators*, was disseminated (1983).
- Nationwide regional workshop for university and college faculty and employers of health educators were held to orient them to the Guide and to get feedback for revision (1984-85).
- The revised document, "A Framework for the Development of Competency-Based Curricula for Entry-Level Health Educators" was disseminated, printed by Metropolitan Life Foundation (1985).
- Workshop on Quality Assurance in the Delivery of Health Education Services: Credentialing the Health Education Specialist convened in Bethesda, Maryland, sponsored by the National Center for Health Education (Second Bethesda Conference, 1986.).
- A Model for Continuing Professional Development of Health Educators was developed by the National Task Force (1987).
- The National Commission for Health Education Credentialing, Inc. (NCHEC) replaced the National Task Force (1988).
- AAHE/AAHPERD took NCHEC Responsibilities and Competencies to the National Council for Accreditation of Teacher Education (NCATE) for acceptance as standards for programs preparing teachers of health education. NCATE adopted these standards (1988).
- Charter Certification Phase was initiated: there were 1558 individuals to become the first Certified Health Education Specialists (CHES) through examination of documentation (1989).
- First election was held for Division Board Directors and at-large Commissioners. Terms began in 1990 (1989).
- Item Writing and Examination Construction Workshop. Professional Examination Service (PES) coordinated the item writing by health educators and developed the examination for certification of health education specialists (1989).

1990s

- First certification examinations for Health Education Specialist were held at 16 U.S. sites. There were 644 candidates that passed and became CHES (1990).
- Examination item writing continues (1990).
- Planned presentations at national meetings began in order to provide information for and communication with professional members (1990).
  AAHE New Orleans, LA
  ACHA San Antonio, TX
  ASHA Long Beach, CA
  SOPHE New York City, NY
- Procedure for Continuing Education System developed.
- *Provider Designation Handbook* and *Recertification Handbook for CHES* published (1990).
- Solicitation of Multiple Event Providers began (1990).
- Employment opportunity announcements specifying "CHES preferred" began to appear (1990).
- AAHE began a review of NCATE folios using the Responsibilities and Competencies (1990).
- The following organizations became designated as Multiple Event Providers of continuing education contact hours (CECH) for CHES (1991):
  AAHE
  ACHA
  ASHA
  New Jersey Graduate Program in Public Health, UMDNJ/Robert Wood Johnson Medical School
  Pennsylvania State University
  SOPHE
  Western Illinois University Department of Health Sciences
- One organization became a Single Event Provider (1991).
- An Executive Director was employed part-time by NCHEC, Inc. (1991).
- First edition of the *Bulletin* (1990).
- Self-study opportunities became available (1992).
  SOPHE - *Health Education Quarterly*
  Wellness Perspectives
- *The Credentialing of Health Educators: An Historical Account 1970-1990.* Helen Cleary, D.Sc., CHES (1995).

Source: The National Commission for Health Education Credentialing, Inc. (1988). Rev. 1990, 1993. 475 Riverside Drive, Suite 677, New York, NY 10115.

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